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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,634	12/29/1999	FU-JYA DANIEL TSAI	11302-0530	2504

23370 7590 04/09/2003

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EXAMINER

PRATT, CHRISTOPHER C

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 04/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/474,634

Applicant(s)

TSAI ET AL.

Examiner

Christopher C Pratt

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17-22 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-22 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendments and accompanying remarks filed 2/10/03 have been entered and carefully considered. Applicant's amendment is found to overcome the rejection over Tsai (5976694), because this reference teaches calendar bonding. Despite this advance, the amendments are not found to patently distinguish the claims over the prior art and Applicant's arguments are not found persuasive of patentability for reasons set forth herein below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-15, 17-22, and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al (5698322) in view of Takeda et al (EP 0801172) and either Handbook of Technical Textiles (HTT) or Thermal Bonding of Nonwoven Fabrics (TBNF), as set forth in the previous action.

Applicant argues that the melting/softening temperatures taught in Tsai do not suggest bonding temperatures. This is not persuasive because melting/softening temperatures do, in fact, suggest bonding temperatures. Fabrics are autogenously bonded by partially melting and/or softening portions of fibers such that the polymeric material comes into contact with adjacent fibers so that upon cooling the material

solidifies and sticks together. Therefore, a teaching of melting/softening temperature is a rough equivalent to a teaching or bonding temperature.

Applicant argues that it would not have been obvious to bond the fibers at a temperature of 20 degrees above the melting temperature. Newly added claims 27 and 29 require a bonding temperature below the melting temperature. Applicant argues that while it may be known to make a proposed modification, the cited art must teach or suggest the desirability of the modification. The examiner notes that there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. The motivation, suggestion nor teaching may come explicitly from the statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. See WMS Gaming, Inc. v. International Game Tech., 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1397 (Fed. Cir. 1999)

In this case, it is the examiner's position that one having ordinary skill in the art would have found it obvious to bond the nonwoven fabric at 20 degrees above the melting temperature or 5 degrees below. Tsai is concerned with the creation of a

nonwoven web, which more easily disintegrates, yet has sufficient strength (col. 1, lines 52-65). A fabric would disintegrate more readily if it were less bonded. Similarly, a fabric would have increased tear strength if bonding were increased. Increasing or decreasing the bonding temperature can easily modify the amount of bonding. Higher temperatures melt more fibers to create more bonding sites. Lower temperatures, of course, have the opposite effect. Therefore, the skilled artisan would have been motivated to decrease the bonding temperature by the desire to increase the disintegration ability of Tsai's fabric. The skilled artisan would have been motivated to increase bonding temperature by the desire to increase the strength of the fabric.

The examiner also notes that bonding temperature is a method limitation, ^{which is} not necessarily give patentable weight. The article claims limit the web to being thoroughly bonded by through-air bonding (convective heating). This method step adds structure, but the bonding temperature doesn't necessarily define any structure. The degree of bonding is dependant on many factors other than bonding temperate including, time exposed to heat and pressure. These claims do not limit these other factors. The claims only require thorough bonding, which is relative.

Applicant argues that the void volume and permeability would not have been inherent in the combination set forth by the examiner. However, said combination utilizes the exact same materials and is created by the same method. Applicant has not proffered arguments explaining why these properties would not have been inherent.

Applicant argues that Takada teaches away from the claimed invention. Applicant's argument refers to the powder binder and other aspects of Takada not relied

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upon by the instant rejection. Takada is only relied upon to provide a teaching of a secondary fiber, which increases strength. Therefore, applicant's argument is not germane to the instant rejection.

Tsai teaches the limitations of new claims 24-25 (col. 8, lines 38-40).

Tsai teaches claim 26 (example 12).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher C. Pratt
April 6, 2003



CHERYL A. JUSKA
PRIMARY EXAMINER